UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/805,994	03/22/2004	Ari Juhani Peltola	872.0145.U1(US)	1211

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EXAMINER
CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
2685	

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
	10/805,994	PELTOLA, ARI JUHANI
Office Action Summary	Examiner	Art Unit	
	Charles Chow	2685	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _15 September 2005_.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-14_ is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _5-7,10,13 and 14_ is/are allowed.
6)☒ Claim(s) _1-4,8,9,11 and 12_ is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____.

Detailed Action

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-4, 8-9, 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al. (US 003/0072,278) in view of Suzuki et al. (US 2003/0014,705 A1)

Regarding **claim 1**, Wu et al. (Wu) teaches a method to operate user equipment 114 in a site selection diversity transmit mode [Fig. 1, paragraph 0002, 0013-0014].

Wu fails to teach the detecting a case where no base station is transmitting to the user equipment UE, the inserting predetermined values into an output of a UE receiver, and decoding the predetermined values.

Suzuki et al. (Suzuki) teaches these features [the detecting of packet loss in 802, Fig. 6, for the no response from transmitting station, base station, in abstract; the inserting of "00", 8053, at the output 206 of system receiver decoder 205, due to packet loss in the receiving signal, Fig. 16, abstract, paragraph 0078]; the decoding the predetermined values [the application decoder 209 for decoding the inserted predetermined value, to detect transmission error [Fig. 17, abstract], in order to prevent the synchronization problem in decoder, for detecting transmission error. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Wu with Suzuki's inserting of "00"at the receiver output, system decoder 205, in order to prevent error in the decoder.

Regarding **claims 2, 4**, Suzuki teaches the predetermined values correspond to
zero bits [the "00" predetermined values is inserted for 8053, Fig. 16].

Regarding **claim 3**, Wu teaches the user equipment operable in a SSDT mode
[paragraph 0002, 0013-0014].

Wu fails to teach the detecting a case where no base station is transmitting to UE,
inserting predetermined values into an output of a UE.

Suzuki teaches the means [802] for detecting a case where no base station is
transmitting to the UE [Fig. 6, the detection of transmission loss for no response from
transmitting station, base station, abstract];

means [205, Fig. 16-17] for inserting predetermined values into an output of a UE
[means 205 for inserting "00 in Fig. 16; means 206 output of system receiver
decoder 205, Fig. 16, abstract, paragraph 0078];

means for decoding the predetermined values [means application decoder 209 for
decoding inserted "00", Fig. 17, abstract], in order to prevent the synchronization
problem in decoder, for detecting transmission error. Therefore, it would have been
obvious to one of ordinary skill in the art at the time of invention to modify Wu with
Suzuki's inserting of "00"at the receiver output, system decoder 205, in order to
prevent the error the decoder.

Regarding **claim 8**, WU teaches a computer program product embodied on a
computer readable medium execution of which operates UE in a SSDT mode [the
software readable procedure 200 executes on access terminal 114 for the SSDT,
paragraph 0026, Fig. 4-8]. Wu fails to teach the detecting a case where no base
station is transmitting to UE, inserting predetermined values into an output of a UE.

   Suzuki teaches the operation of detecting a case where no base station is

transmitting to the UE [Fig. 6, the detection of transmission loss for no response

from transmitting station, base station, abstract];

inserting predetermined values into an output of a UE receiver [the 205 for inserting

"00 in Fig. 16; at the 206 at the system receiver decoder output, Fig. 16, paragraph

0078];

decoding the predetermined values [209 for decoding inserted "00", Fig. 17,

abstract], in order to prevent the synchronization problem in decoder, for detecting

transmission error. Therefore, it would have been obvious to one of ordinary skill in

the art at the time of invention to modify Wu with Suzuki's inserting of "00"at the

receiver output, system decoder 205, in order to prevent the error in the decoder.

Regarding **claims 9, 12**, Suzuki teaches the predetermined values correspond to

zero bits [the "00" predetermined values is inserted for 8053, Fig. 16].

Regarding **claim 11, Wu teaches** an <u>integrated circuit installable</u> in UE that is

operable in a SSDT mode [the application specific integrated circuit ASIC for the

SSTD, paragraph 0072]. Wu fails to teaches the circuitry responsive to a condition

· where no base station is transmitting to the UE, the insert predetermined values into

an output of a UE receiver.

Suzuki teaches the circuitry responsive to a condition where no base station is

transmitting to the UE [the circuitry 802 for detecting packet loss for no response

from base station];

insert predetermined values into an output of a UE receiver [the 205 for inserting

"00 in Fig. 16; at the 206 at the system receiver decoder output, Fig. 16, paragraph

0078] and circuitry to decode the predetermined values [circuitry 209 for decoding

inserted "00", Fig. 17, abstract], in order to prevent the synchronization problem in

decoder, for detecting transmission error. Therefore, it would have been obvious to

one of ordinary skill in the art at the time of invention to modify Wu with Suzuki's

inserting of "00" at the receiver output, system decoder 205, in order to prevent the

error in decoder.

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance:

Claims 5-7, 10, 13-14 are allowable in the previous mailed office action, and the

reason for allowable is included in below.

Applicant has shown that reference **Toskala et al. (2003/0219,037 A1)** belongs to

Assignee, **Nokia Corporation** (page 7 of applicant's amendment).

Claims 5-7, 10, 13-14 are allowable over the prior art of record, the prior art fails to

teach singly, particularly, or in combination, the subject matter, for the **in response**

to detecting a case where selected primary cell fails to transmit a downlink

dedicated physical channel DPCH **to the UE,** inserting predetermined sample values

into the output of a UE receiver **prior to a UE channel decoder; and decoding the**

predetermined sample values as zero bit so as to maintain proper channel

decoder operation, for the site selection diversity transmit, to prevent the

situation when there is no response in the messages for the requesting of a

communication channel from base stations in the downlink physical channel DPCH,

to the mobile station, as shown in independent claims 5, 6, 8, 10, 13. The dependent

claims are also allowable due to their dependency upon the independent claims

having additional claimed features.

The closest patent to **Kim et al. (US 2003/0095,532 A1)** teaches the uplink channel

UL-DPCH transmitted from user equipment UE (Fig. 3A), which has feedback field

FBI 314 which contains control information for site selection diversity transmission

SSDT [0016, 0053], the channel quality indicator CQI [0017], the selecting of best

primary cell [0008-0009], Kim fails to teach the detecting a case where no base

station is transmitting to UE; inserting predetermined values into a received signal

and decoding the predetermined values.

Other prior arts in below has been considered, but they fail to teach the above

claimed features.

Futamura (US 5,910,947) teaches the base station does not receive the reply from

master base station, due to another base station communicating with the identical

master station, only transmit the "no sensing", sense value of 999 to mast station

(col. 20, lines 20-35, col. 6, lines 45-65, abstract),

Kobayashi (US 6,721,564 B1) teaches the rake receiver 25 comprising 4 (fingers,

Fig. 2, col. 8, lines 8-20), the microprocessor MPU 13 (Fig. 2, col. 43-49), the MPU

13 comprising measurement control means (col. 8, lines 42 to col. 9,line 10)

assigning the at least one finger to demodulate the downlink signal, and determining

that too little energy is present in the at least one finger that is assigned to

demodulate the downlink signal (the step 3a, Fig. 3), for the mobile terminal to

measure the receiving strength of pilot channel (step 3f; col. 9, line 60 to col. 10, line

15; col. 2, lines 31-67).

Childress et al. (US 5,175,866) teaches the trunking card cease attempting to

communicate with the failed primary controller, by communicating with another site

controller, to prevent the effect from a failure site controller (abstract, Fig. 6A-6E, Fig.

8, col. 14, line 58 to col. 15, line 22; col. 18, lines 32-56).

Riedle (US 2005/0039,205 A1) teaches the controller can setup a null value for the

retire channel X [0048-0049], having later filing date 8/12/2003.

Any comments considered necessary by applicant must be submitted no later than

the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments

on Statement of Reasons for Allowance."

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 8-9, 11-12 have been considered

but are moot in view of the new ground(s) of rejection.

Regarding applicant's amendment for the detecting a case where no base station is

transmitting to the UE, inserting predetermined values into an output of a UE

receiver; and decoding the predetermined value.

Suzuki et al. (US 2003/0014,705 A1) teaches this claimed features [the inserting of

·"00", 8053, for as many bytes as desired at the output of system decoder 205, 706,

due to packet loss in the receiving signal, Fig. 16, abstract, paragraph 0078], due to

no response received, from transmitting station, base station, the packet loss during

transmission [abstract], the application decoder 209 for decoding the predetermined

value inserted to detect transmission error [Fig. 17, abstract].

Wu et al. (US 2003/0072,278 A1) teaches the a method to operate user equipment

114 in a site selection diversity transmit mode [Fig. 1, paragraph 0002, 0013-0014],

the computer readable program [a method to operate user equipment 114 in a site

selection diversity transmit mode for site selection transmit diversity SSTD [

paragraph 0026, Fig. 4-8], the integrated circuit for SSTD [paragraph 0072].
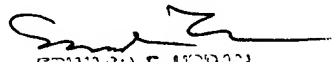
Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles C. Chow whose telephone number is (571) 272-7889. The examiner can normally be reached on 8:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on (571) 272-7899. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charles Chow C.C.

October 29, 2005.